CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2007-_____

WASTE DISCHARGE REQUIREMENTS

FOR
MOZZARELLA FRESCA, INC.

TIPTON CHEESE PROCESSING PLANT
TULARE COUNTY

TENTATIVE ORDER

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. Mozzarella Fresca, Inc. (hereafter Discharger) submitted a Report of Waste Discharge (RWD) dated 11 February 2004 in support of discharge to land of cheese manufacturing wastewater from its Tipton Cheese Processing Plant (hereafter Facility). Additional information to complete the RWD was received 29 March 2004, 14 April 2004, and 18 June 2004.

2. The Facility was formerly operated by the Sequoia Specialty Cheese Company, which discharged its wastewater to the Tipton Community Services District's wastewater treatment facility and was not previously regulated under Waste Discharge Requirements. After a period of inactivity, Mozzarella Fresca acquired and upgraded the Facility and commenced operation in September 2003 for specialty cheese manufacturing. The Discharger reportedly intended to resume discharging wastewater to the Community Services District's wastewater treatment facility but was not able to obtain service. The Discharger then made an agreement with Mr. Frank Mendoza who owns and operates FM Dairy No. 2 located at 196 Olive Avenue in Tipton to discharge wastewater into the existing dairy ponds where it was commingled with dairy wastewater and used to irrigate 20 acres of farmland. The area was not sufficient to handle the combined discharge and Cleanup and Abatement Order (CAO) No. R5-2005-0702 was issued to Mozarella Fresca Cheese Processing Plant and FM Dairy No. 2 on 4 February 2005. A requirement of the CAO was that the Discharger cease discharge of wastewater to FM Dairy No. 2.

3. In compliance with the CAO the Discharger ceased discharging to FM Dairy No. 2 on 14 April 2005. The Discharger entered into an agreement with Mr. Mike Silva, owner of Mike Silva Ranches (Reuse Area), to reuse the wastewater, combined with irrigation water, to irrigate approximately 310 acres of farmland.

4. The Facility at 615 North Burnett Road in Tipton, is at Latitude 36° 3' 52" and Longitude -119° 19' 50", and is in the northwest quarter of Section 31, T21S, R25E, MDB&M, as shown on Attachment A, which is attached hereto and made part of this Order by reference. The Facility comprises Assessor's Parcel Numbers 230-120-001, 230-110-013, and 230-110-014. The Reuse Area, owned by Mr. Silva, comprises Assessor's Parcel Numbers 232-120-011, 232-120-012, 232-120-010, 230-010-003, and 230-010-004.

5. For purposes of this Order, the term "Treatment System" shall refer to the wastewater treatment system, which consists of a cavitation air flotation (CAF) unit, a whey recovery system, storage tanks, and associated piping. Attachment B of this Order, which is attached hereto and made part of this Order by reference, depicts a process flow diagram of the Treatment System.

Existing Facility and Discharge

6. The Facility is a cheese manufacturing plant that processes milk into Italian style fresh mozzarella and ricotta cheese. According to the RWD the Facility generates approximately 0.66 gallons of wastewater per pound of cheese.

7. The Facility employs approximately 180 people, who contribute to the local economy of Tipton.

8. Domestic wastewater is handled separately and disposed of at the Tipton Community Services District Wastewater Treatment Facility.

9. The present volume of wastewater flow is approximately 0.11 million gallons per day (mgd). The Discharger estimates that flow will increase to approximately 0.25 mgd within the next five years.

10. The average values for constituents of concern for 2006 are the most representative of the discharge because of changes in the manufacturing processes to reduce the EC of the discharge. Self-monitoring data from January 2006 to December 2006 characterize the discharge as follows:

Constituent	Units[1]	Average Concentration
BOD_5	mg/L	720
Total Nitrogen	mg/L	22
Chloride	mg/L	151
Potassium	mg/L	105
Phosphorus	mg/L	132
Boron	mg/L	0.09

1. umhos/cm = micromhos per centimeter. mg/L = milligrams per liter.

11. In 2005, the Discharger submitted a salinity reduction survey that analyzed the salinity of various discharge components and recommended best practicable treatment or control (BPTC) measures to reduce salinity. Some of the measures identified in the salinity reduction survey are being implemented, while others were found to be ineffective. In addition, the Discharger reports that it has implemented other undocumented measures. Salinity control measures include: segregating water softener regeneration brine;

substituting an anionic polymer for ferric chloride in the wastewater treatment process; reducing product leaks and spills through the addition of drip pans, piping, and flow controls; redesigning and upgrading milk receiving and transportation valves and piping; adding a drain hose to the curd incline conveyor; purging hoses after loading trucks; diverting water from the utensil washing machine to the whey tanks; and directly injecting sodium chloride into the finished product rather than soaking in a brine vat.

12. Since implementation of the above salinity reduction measures, the average EC and TDS of the discharge has been about 1,400 µmhos/cm and 1,200 mg/L, respectively.

13. The pH of the discharge is highly variable and has ranged from 2.0 to 12.0 with a monthly average of approximately 5.0.

Water Recycling

14. Wastewater from the Facility is discharged to land owned by Mr. Mike Silva and referred to as Mike Silva Ranches (Reuse Area). The Reuse Area is divided into four fields with a total of 288 net acres used to grow feed and fodder crops such as alfalfa, cotton, and wheat/corn silage. The Reuse Area is irrigated with a combination of wastewater, groundwater, and surface water supplied by the Lower Tule River Irrigation District, which contributes water from the Lower Tule River and the Friant-Kern Canal.

15. The blended irrigation water is then applied via flood irrigation at plant uptake rates for both nutrient and hydraulic loading during the growing season. The well water to wastewater ratio is typically three to one and often higher during the summer months to meet crop demands. Based on an average total nitrogen concentration of the wastewater and irrigation water of 22 mg/L and 5 mg/L, respectively, the contribution of nitrogen to the Reuse Area is less than 5 lbs/acre/month and fertilizer is needed during the growing season to meet crop demands for nitrogen.

16. Based on an average BOD_5 concentration of the wastewater of 700 mg/L the typical loading rate to the designated disposal area would be less than 10 pounds/acre/day, which is significantly below the USEPA recommended rate of 100/lbs/acre/day according to publication No. 625/3-77-0007, *Pollution Abatement in the Fruit and Vegetable Industry*.

17. A 600,000-gallon above ground storage tank was constructed at the Reuse Area to store wastewater and allow for better regulation of the wastewater discharge to the fields.

18. Irrigation tailwater is controlled through such measures as perimeter berms and/or grading to prevent off-site drainage. Irrigation water collected in the tailwater ponds is returned to the irrigation system and re-applied to the crops.

19. Mr. Silva practices pre-irrigation during the non-growing season. In the winter of 2006 the percentage of wastewater to total water applied during November, December, and January was approximately 25%. The total hydraulic loading over the entire 288 acres was about

0.056 inches/day between November and January (of which approximately 0.014 inches/day was wastewater). Total nitrogen levels in the wastewater were reported as 31.5 mg/L, 27.5 mg/L, and 14 mg/L, respectively. With dilution the total nitrogen applied to the fields was less than 10 mg/L. In addition, Mr. Silva typically grows a winter crop of alfalfa and early corn in three of the four fields.

20. The RWD identifies crop nitrogen requirements for alfalfa at 480 lbs/acre and double crop of wheat/corn silage at 425 lbs/acre based on the *Western Fertilizer Handbook, 9th edition.*

Site-Specific Conditions

21. The Facility is in an arid climate characterized by hot dry summers and mild winters. The rainy season generally extends from November through March. Occasional rains occur during the spring and fall months, but summer months are dry. Average annual precipitation and evaporation in the Reuse Area are about 10.25 inches and 63.86 inches, respectively, according to information published by the California Department of Water Resources.

22. According to the USDA Natural Resources Conservation Service *Soil Survey of Tulare County, Western Part (CA 659), 2001*, the soils are Biggriz Loam (Class II through VI soils) and Colpien Loam (Class I soils). These soils are both loam in texture and have a permeability of 0.6 to 2.0 inches/hour from the surface to approximately one foot in depth.

23. According to the RWD, storm water at the Facility is generally absorbed into the open lawn and dirt areas or diverted to the process wastewater stream. The Discharger is not required to obtain coverage under a National Pollutant Discharge Elimination System general industrial storm water permit since all storm water runoff is retained onsite and does not discharge into a water of the United States.

24. According to Federal Emergency Management Agency (FEMA) maps the processing facility lies outside of the 500-year flood zone. However, the designated disposal area lies within the 100-year floodplain. Wastewater is stored in a 600,000-gallon aboveground storage tank to prevent inundation from flooding prior to being used as irrigation water.

25. Land use in the vicinity of the Reuse Area is primarily agricultural. Primary crops grown in the area include alfalfa, corn (forage), almonds, walnuts, and other row crops. Additional crops including sugar beets, cotton, grapes, plums, and hay and grain crops are typically grown in the area according to DWR land use data published in 1999. In addition there are several dairies in the immediate vicinity. Most crops grown in this area are flood irrigated, although others are sprinkler, micro-sprinkler, and drip irrigated, according to the University of California Cooperative Extension.

Groundwater Considerations

26. Groundwater in the vicinity of the Reuse Area is encountered at about 80 to 100 feet below ground surface (bsg) and flows west-southwest, according to information in Lines of Equal Elevation of Water in Wells in Unconfined Aquifer, published by Department of Water Resources in Spring 2004.

27. Source water for the Facility is provided from an on-site well and Tipton CSD. The following table lists average concentration for constituents from samples collected in 2006.

Constituent	Units[1]	Source Water
Electrical Conductivity (EC)	µmhos/cm	212
Total Dissolved Solids	mg/L	140
Nitrate as Nitrogen	mg/L	5
Chloride	mg/L	9.3
Sodium	mg/L	43.8
Boron	mg/L	< 0.1

1. umhos/cm = micromhos per centimeter. mg/L =milligrams per liter.

28. In January 2007, groundwater monitoring wells were installed in the Reuse Area. During the installation groundwater was encountered at depths ranging from 50 to 75 feet below grade. MW-1 on the northeast edge of the Reuse Area is 79 feet deep and has a 30-foot screened interval. MW-2 on the southwest corner and MW-3 on the southeast corner of the Reuse Area are 80 feet deep and constructed with a 20-foot screened interval. During the initial sampling, groundwater flow was to the south-southwest at a gradient of 5 feet/1000 feet. An irrigation well approximately 300 feet south of MW-1 and another approximately 50 feet north of MW-3 could create cones of depression that could influence groundwater depth measurements in the monitoring wells.

29. The following table lists average concentrations for groundwater constituents from samples collected in January and February 2007. All values are in mg/L except for EC, which is in µmhos/cm. The values for HCO_3 are as $CaCO_3$. Results for NO_2, NH_4, TKN, SO_4, P, and CO_3 are not included since values were low or non-detect.

Groundwater Analytical Results

Constituent	MW-1	MW-2	MW-3
Depth-to-groundwater (feet bsg)	55.6	66	67.9
Electrical Conductivity (EC)	351	410	445
Nitrate as Nitrogen	3.4	5.3	5.5
Sulfate	10.7	18.6	16.5
Total Dissolved Solids	312	310	341

Groundwater Analytical Results

Constituent	MW-1	MW-2	MW-3
Calcium	49.1	49.1	54
Magnesium	29.6	6.4	8.2
Sodium	41	42.5	41
Potassium	21.1	1.7	2.7
Bicarbonate as CaCO3	178	205	211
Chloride	23.5	18.5	18.3

30. The existing data indicates that first encountered groundwater beneath the Reuse Area is of good quality with nitrate as nitrogen concentrations below the Maximum Contaminant Level (MCLs) for nitrogen of 10 mg/L in both up-gradient and down-gradient monitoring wells and an average EC concentration of approximately 400 µmhos/cm.

Basin Plan, Beneficial Uses and Regulatory Considerations

31. The Water Quality Control Plan for the Tulare Lake Basin, 2nd Edition, (hereafter Basin Plan) designates beneficial uses, establishes numerical and narrative water quality objectives, contains implementation plans and policies for protecting all waters of the basin, and incorporates by reference plans and policies of the State Water Board. Pursuant to Section 13263(a) of the California Water Code (CWC), these waste discharge requirements implement the Basin Plan.

32. The Facility is in Detailed Analysis Unit 243 of the Tule Basin. Beneficial uses of underlying groundwater are Municipal and Domestic Supply, Agricultural Supply, and Industrial Service Supply, Industrial Process Supply, and Wildlife Habitat [supply].

33. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, requires waters designated as domestic or municipal supply to meet the MCLs specified in Title 22, California Code of Regulations. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that that the Regional Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

34. The Basin Plan establishes narrative water quality objectives for Chemical Constituents, Tastes and Odors, and Toxicity. The Toxicity objective, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. Quantifying a narrative water quality objective requires a site specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.

35. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until a valley wide drain is constructed to carry salts out of the basin. Until the drain is available, the Basin Plan establishes several salt management requirements, including:

    a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum EC shall not exceed the EC of the source water plus 500 µmhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.

    b. Discharges to areas that may recharge good quality groundwaters shall not exceed an EC of 1,000 µmhos/cm, a chloride content of 175 mg/L, or a boron content of 1.0 mg/L.

36. Title 22 in Table 64449 B establishes recommended, upper, and short term ranges for EC, TDS, chloride, and sulfate. The recommended and upper ranges are 900 and 1,600 µmhos/cm for EC, 500 and 1,000 mg/L for TDS, and 250 and 500 mg/L for chloride and for sulfate, respectively.

37. The list of crops in Finding 25 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge, but is representative. Though salt and boron sensitive crops could potentially be grown in Class I soils, which make up approximately 40% to 50% of the soils in the area (i.e., strawberries, onions, and beans) none of these crops were observed or reported as being currently grown in the area based on DWR land use maps.

Antidegradation Analysis

38. State Water Resources Control Board Resolution No. 68-16 (“Policy with Respect to Maintaining High Quality Waters of the State”) (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:

    a. The degradation is consistent with the maximum benefit to the people of the State;

    b. The degradation will not unreasonably affect present and anticipated future beneficial uses;

    c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives; and

    d. The discharger employs BPTC to minimize degradation.

39. Constitutes of concern that have the potential to degrade groundwater include, in part, nutrients and salts. However, the discharge will likely not degrade the beneficial uses of groundwater because:

    a. For nitrogen, the loading to the Reuse Area is less than 5 lbs/acre/month or 60 lbs/year, which is significantly below the nitrogen uptake rates of 400 to 480 lbs/year for alfalfa and a double crop of corn and winter wheat.

    b. For BOD, the loading rate to the Reuse Area is less than 10 lbs/acre/day, which is significantly below the USEPA recommended rate of 100 lbs/acre/day according to publication No. 625/3-77-007, *Pollution Abatement in the Fruit and Vegetable Industry*.

    c. For salinity, the average EC of the wastewater (1,400 umhos/cm) exceeds the Basin Plan Limit of 1,000 µmhos /cm. However, the Basin Plan does allow blending to promote beneficial reuse. The wastewater is used to supplement irrigation of existing commercial crops and is blended at a minimum of three to one to meet irrigation needs. With blending, the EC of the discharge will be below 700 µmhos/cm, which meets the definition of a Class I Irrigation Water as defined by the U.S. Department of Agriculture. Although not quantified, a portion of the EC in the discharge can be attributed to organic compounds that will break down in the soil profile. In addition, the Discharger has implemented management measures proposed in various plans and reports to reduce the EC of the discharge. Therefore, any degradation would be consistent with the antidegradation policy.

Treatment and Control Practices

40. The Discharger provides treatment and control of the discharge that incorporates:

    a. Screening to remove solids and haul them offsite for disposal.

    b. Pre-treatment using a CAF system to remove fat and suspended solids from the wastewater.

    c. Use of drip pans, piping, and flow controls to reduce product leaks and spills.

    d. Application of wastewater at plant uptake rates for nitrogen and organic loading.

    e. Operation of a tail water recovery system in the Reuse Area to collect and recirculate water to improve irrigation efficiency and prevent standing water.

41. This Order establishes groundwater limitations that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality

objectives set forth in the Basin Plan. This Order includes a monitoring and reporting program that contains groundwater monitoring to assure that the highest water quality consistent with the maximum benefit to the people of the State will be achieved.

Water Recycling Criteria

42. State Water Board Resolution No. 77-1, Policy with Respect to Water Recycling in California, encourages recycling projects that replace or supplement the use of fresh water, and the Water Recycling Law (California Water Code Section 13500-13529.4) declares that utilization of recycled water is of primary interest to the people of the State in meeting future water needs.

43. The Basin Plan encourages recycling on irrigated crops wherever feasible and indicates that evaporation of recyclable wastewater is not an acceptable permanent disposal method where the opportunity exists to replace an existing use or proposed use of fresh water with recycled water.

Designated Waste and Title 27

44. CWC Section 13173 defines designated waste as either:

    a. Hazardous waste that has been granted a variance from hazardous waste management requirements pursuant to Section 25143 of the Health and Safety Code.

    b. Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions as a waste management unit, could be released in concentrations exceeding applicable water quality objectives or could reasonably be expected to affect beneficial uses of the waters of the state contained in the appropriate state water quality control plan.

45. Release of designated waste is subject to full containment pursuant to the requirements of Title 27, CCR, Section 20005 et seq. (hereafter “Title 27”). Title 27 Section 20090(b) exempts discharges of designated waste to land from Title 27 containment standards provided the following conditions are met:

    a. The applicable regional water board has issued waste discharge requirements, or waived such issuance;

    b. The discharge is in compliance with the applicable basin plan; and

    c. The waste is not hazardous waste and need not be managed according to Title 22, CCR, Division 4.5, Chapter 11, as a hazardous waste.

46. The Discharger constructed a 600,000-gallon storage tank to hold the wastewater prior to blending with irrigation water and discharge to the Reuse Area. The tank is a fully enclosed

aboveground storage tank constructed of reinforced concrete and as such is exempt from Title 27, pursuant to section 20090(i).

CEQA

47. On 3 November 2004, the County of Tulare Resource Management Agency adopted Resolution No. 8078 for a Negative Declaration to allow discharge of pre-treated wastewater from an existing cheese plant to approximately 310 acres (gross) of farmland.

48. The Regional Water Board, as a responsible agency under CEQA, reviewed the Negative Declaration and concurs with the findings provided that … "All ponds and other surface impoundments that receive cheese process wastewater shall be constructed in accordance with the standards of Title 27 of the California Code of Regulations unless the Regional Water Board finds the discharge is exempt from Title 27 and approves an alternate design". Finding 46 discusses the measures taken by the Discharger to comply with the requirements of Title 27.

49. This Order implements measures necessary to mitigate any adverse impacts to groundwater from the discharge to less than significant levels, including:

    a. Effluent Limitation B.1, which restricts monthly average daily discharge flow to 0.25 mgd.

    b. Effluent Limitations B.2, which establish effluent limitations for EC, chloride, and boron.

    c. Discharge Specification C. 4, which stipulates waste constituents cannot be released or discharged in a concentration or mass that causes violation of the Order's groundwater limitations.

General Findings

50. Pursuant to CWC Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

51. CWC Section 13267(b) states that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

52. The technical reports required by this Order and the attached Monitoring and Reporting Program No. R5-2007-____are necessary to assure compliance with these waste discharge requirements. The Discharger operates the Facility that discharges the waste subject to this Order.

53. The California Department of Water Resources set standards for the construction and destruction of groundwater wells, as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells.

54. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

Public Notice

55. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

56. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED that, pursuant to Sections 13263 and 13267 of the California Water Code, Mozzarella Fresca, Inc. and their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Bypass or overflow of untreated wastes, except as allowed by Provision E.2 of Standard Provisions and Reporting Requirements, is prohibited.

3. Discharge of waste classified as ‘hazardous’, as defined in Section 2521(a) of Title 23, California Code of Regulations, Section 2510 et seq., is prohibited. Discharge of waste classified as ‘designated’, as defined in California Water Code Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.

4. Application of treated wastewater in a manner or location other than that described herein is prohibited.

B. Effluent Limitations

1. The monthly average daily discharge flow shall not exceed 0.25 mgd.

2. The discharge shall not exceed the following effluent limitations:

Constituent	Units[1]	Monthly Average
EC[2]	µmhos/cm	1,600
Chloride	mg/L	175
Boron	mg/L	1

[1] µmhos/cm = micromhos per centimeter. mg/L =milligrams per liter.

[2] Electrical conductivity at 25°C

3. The average concentration of total nitrogen for the combined discharge of wastewater and irrigation water to the Reuse Area shall not exceed 10 mg/L during the non-growing season (i.e., November, December, and January).

C. Discharge Specifications:

1. All conveyance, treatment, storage, and disposal units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

2. Objectionable odors shall not be perceivable beyond the limits of the Facility or the Reuse Area at an intensity that creates or threatens to create nuisance conditions.

3. Application of waste constituents to the Reuse Area shall be at reasonable agronomic rates to preclude creation of a nuisance or degradation of groundwater, considering the crop, soil, climate, and irrigation management system. The annual nutritive loading of the Reuse Area, including the nutritive value of organic and chemical fertilizers and of the wastewater shall not exceed the annual crop demand.

4. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of groundwater limitations.

D. Reuse Area Specifications

1. The perimeter of the Reuse Area shall be graded to prevent ponding along public roads or other public areas and prevent runoff onto adjacent properties not owned or controlled by the Discharger.

2. No physical connection shall exist between cheese processing wastewater and any domestic water supply or domestic well, or between wastewater piping and any irrigation well that does not have an air gap or reduce pressure principle device.

3. The Reuse Area shall be managed to prevent breeding of mosquitoes. More specifically:

   a. All applied irrigation water must infiltrate completely within a 48-hour period;

   b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation; and

   c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store recycled water.

E. Solids Specifications

1. Any handling and storage of solids and sludge at the Facility or in the Reuse Area shall be temporary, and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations of this Order.

2. Collected screenings, sludges, and other solids removed from the liquid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.

3. Any proposed change in solids use or disposal practice shall be reported to the Executive Officer at least **90 days** in advance of the change.

F. Groundwater Limitations:

1. Release of waste constituents from any treatment or storage component associated with the WWTF shall not cause or contribute to groundwater:

   a. Containing constituent concentrations in excess of the concentrations specified below or natural background quality (as determined in Finding 29 and updated as appropriate as a result of ongoing monitoring), whichever is greater:

      (i) Nitrate as nitrogen of 10 mg/L.

      (ii) For constituents identified in Title 22, the MCLs quantified therein.

   b. Taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

G. Provisions:

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements)*, dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as *Standard Provisions*.

2. The Discharger shall comply with Monitoring and Reporting Program (MRP) No. R5-2007-____, which is part of this Order, and any revisions thereto as adopted by the Regional Water Board or approved by the Executive Officer. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger self-monitoring reports.

3. The Discharger shall keep at the Facility a copy of this Order, including its MRP, Information Sheet, attachments, and Standard Provisions, for reference by operating personnel. Key operating personnel shall be familiar with its contents.

4. The Discharger must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger only when the operation is necessary to achieve compliance with the conditions of the Order.

5. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

6. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Regional Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Regional Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

7. In the event of any change in control or ownership of land or waste treatment and storage facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the appropriate Regional Water Board office (currently, the Fresno office).

8. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the address and telephone number of the persons responsible for contact with the Regional Water Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Regional Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.

9. At least **90 days** prior to termination or expiration of any agreement involving a recycled water use area that may jeopardize compliance with this Order due to lack of disposal capacity, the Discharger shall notify the Executive Officer in writing of the situation and of what measures have been taken or are being taken to ensure full compliance with this Order.

10. **By 1 January 2008**, the Discharger shall submit a Final Salinity Control Plan detailing all measures taken to reduce the salinity of the discharge, and documenting that all feasible salinity reduction measures have been implemented.

11. The pH of the discharge shall not be less than 4.5 or greater than 10 pH units for more than three consecutive 24-hour composite sampling events. In the event that the pH of the discharge is outside of this range for more than three consecutive sampling events, the Discharger shall submit a technical evaluation in its monthly SMRs documenting the pH of the blended discharge to the Reuse Area, and if necessary demonstrate that the effect of the discharge on soil pH will not exceed the buffering capacity of the soil profile.

12. If the Regional Water Board determines that waste constituents in the discharge have reasonable potential to cause or contribute to an exceedance of an objective for groundwater, this Order may be reopened for consideration of addition or revision of appropriate numerical effluent or groundwater limitations for the problem constituents.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

_____
PAMELA C. CREEDON, Executive Officer

Order Attachments:
A. Vicinity Map
B. Cheese Processing Plant Flow Diagram

Monitoring and Reporting Program No. R5-2007-____
Information Sheet
Standard Provisions (1 March 1991) (separate attachment to Discharger only)

kc/DKP/kes 7/03/07